Attorney Docket No.: 034299-612

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A microwave Microwave tube (3) for generation of an electromagnetic wave with frequency F, characterised in that it comprises the microwave tube comprising:

mechanical means for varying the frequency F wherein said mechanical means are composed of:

a set of rings (A, B, C, D) defining a periodic structure inside the tube; and mechanical means (4, 5, 2, G; 7, 8, 9, 10) for displacing the said rings with respect to each other while maintaining a periodicity for the periodic structure during displacement of the rings.

- 2. (Currently Amended) The microwave Microwave tube (3) according to claim 1, wherein characterised in that the mechanical means for displacing the rings comprises:
 - a set of electrical contacts (2) between rings;
 - at least one lead screw (4);
 - a set of nuts (5) installed on the lead screw; and
 - a set of rods (6), each rod firmly connecting a nut to a ring, the tube (3) being provided with at least one slit (G) enabling the set of rods (6) to pass in the wall of the tube, the lead screw (4) comprising several sectors with different pitches capable of keeping intervals between the rings during rotation of the lead screw.

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- (Currently Amended) A microwave tube (3) according to claim 1, characterised in that wherein the mechanical means for displacing the rings comprises:

 a set of electrical contacts (2) between the rings; and

 one set of pins (7), each pin of said one set of pins respectively being firmly connected to a

 corresponding ring, the tube (3) being provided with at least one longitudinal slit (9)

 through which each one of the pins (7) can pass in the wall of the tube, a ring (8)

 external to the tube comprising a set of slits (10), each slit (10) in the outer ring (8)

 allowing the passage of a corresponding pin (7), the slits each slit in the set of slits having a different inclination for each corresponding ring so as to maintain a periodicity for the different rings during displacement of the rings.
- 4. (Currently Amended) A microwave tube according to claim 1, characterised in that it wherein the microwave tube is a progressive wave tube (PWT), a backward wave tube (BWO) PWT, a BWO type tube, a klystron, a magnetron, a carcinotron, or a maser.
- 5. (Currently Amended) A microwave tube according to claim 1, characterised in that wherein the periodic structure of the microwave tube is made of corrugated plate.
- 6. (Currently Amended) A microwave tube according to claim 1, eharacterised in that it emprises further comprising an insert with an adjustable length.